

REMARKS

Claims 1-6 were pending in the application. After entry of this amendment, Claims 7-20 are pending. Claims 7-20 were added and then Claims 1-6 was canceled. Applicants submit this Amendment in order to further clarify the invention described and claimed, without regard to any prior art.

Applicant submits that the Claims as amended are supported by the application as filed and do not add new matter. Applicant respectfully requests that the Examiner precisely identify teachings or suggestions in the prior art that would preclude patentability of the pending claims in the event that the Examiner is not in a position to allow the claims now pending.

Attached hereto is a marked-up version of the changes made to the specification and claims by the current amendment. The attached page is captioned "**VERSION WITH MARKINGS TO SHOW CHANGES MADE**". Attached hereto is a clean version of the claims by the current amendment. The attached page is captioned "**PENDING CLAIMS**".

The Application being in condition for allowance, the Applicants respectfully request that the Examiner issue a Notice of Allowance at an early date. If the Examiner believes that personal communication will expedite the prosecution of this application, the Examiner is invited to telephone the undersigned at the number provided below.

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The Commissioner is hereby authorized to charge any underpayment of fees associated with this communication, including any necessary fees for extension of time or additional claims, and/or credit any overpayment to Deposit Account No. 50-2319 (Order No. A-70543-1/RMA/KRG).

Respectfully submitted,

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VERSION WITH MARKINGS TO SHOW CHANGES MADE

1. (Canceled) A computer system that repairs itself on the fly.
2. (Canceled) A method for a computer repairing itself, the method comprising the computer-executed steps of:
 - booting from a first boot device;
 - then, in response to a signal indicating a need for repair, booting from a second boot device; and
 - then repairing software on the first boot device while booted from the second boot device.
3. (Canceled) The method of claim 2, wherein the step of repairing software comprises copying software from a device other than the first boot device onto the first boot device.
4. (Canceled) The method of claim 2, wherein the step of repairing software comprises copying software from the second boot device onto the first boot device.
5. (Canceled) The method of claim 2, wherein the step of repairing software comprises copying template, backup and/or archive software from a device other than the first boot device onto the first boot device.
6. (Canceled) A method for a computer repairing itself, the method comprising the computer-executed steps of:
 - booting from a first boot device;
 - then, in response to a signal indicating a need for repair, booting from a second boot device; and
 - then, while booted from the second boot device, copying template, backup and/or archive software from the second boot device onto the first boot device.

1 7. (New) A method for a computer repairing itself to an operational status at any
2 time during operation, the method comprising the computer-executed steps of:

3 booting from a first hard disk drive boot device disposed within a main
4 computer hardware box of the computer;

5 then, in response to receiving a signal indicating a need for repair of the
6 computer during the booting or during any operating state, booting from a second hard disk
7 drive boot device; the second hard disk drive boot device being physically present within the
8 main computer hardware box of the computer prior to receiving the signal indicating a need
9 for repair; and

10 then repairing software on the first hard disk drive boot device while booted
11 from the second hard disk drive boot device and selectively either: (i) maintaining operation
12 of the computer from the second boot device to restore operational status of the computer
13 during repairing of the software on the first hard disk device, or (ii) changing to operation of
14 the computer from the second boot device to the first boot device to restore operational status
15 of the computer.

16 8. (New) The method of claim 7, wherein the step of repairing software further
17 comprises:

18 copying software from a device other than the first boot device onto the first
19 boot device, said device other than said first boot device being either said second boot device
20 or a third device different from said first boot device and said second boot device; and

21 said copying of software including the copying of any application, operating-
22 system, repair-process software, template, backup, archive software, boot record, a partition
23 table, and a basic input-output system (BIOS).

24 9. (New) The method of claim 8, wherein the step of booting from a second boot
25 device comprises:

1 automatically under computer control altering identification jumpers of a data
2 storage device to be switched to logically and physically switch the second boot device to
3 make the second boot device bootable.

4 10. (New) The method of claim 8, wherein the signal indicating a need for repair
5 is either: (i) self-generated by the computer without human intervention; or (ii) generated by
6 the computer in response to a single action by an external user, said single action selected
7 from the set of actions consisting of: pressing a key or combination of keys on a keyboard of
8 the computer and pressing or changing the state of a physical switch different from an on-off
9 switch of the computer and exposed on an exterior surface of the main computer hardware
10 box of the computer.

11 11. (New) The method of claim 10, wherein the step of repairing software
12 comprises: automatically repairing software on the first boot device according to preset
13 preferences without further direction from the user, the preset preferences designating to
14 repair the computer according to whether: to recover data, to run a virus check, to reformat
15 the first boot device, to revert to a backup, or to run diagnostics.

16 12. (New) The method of claim 10, wherein the step of repairing software
17 comprises: reformatting the first boot device and then copying software onto the first boot
18 device; or resetting parameters in a persistent memory and then copying software onto the
19 first boot device.

20 13. (New) The method of any of claims 11, wherein:

21 before booting from the second boot device, software is installed onto the
22 second boot device; and the installing software onto the second boot device comprises one of:
23 (a) installing software onto the second boot device; (b) copying installed software onto the
24 second boot device; (c) copying installation software onto the second boot device; and (d)
25 writing onto the second boot device a version of an operating environment running as a result
26 of the boot from the first boot device; and

27 after the installing software onto the second boot device and before the
28 booting from the second boot device, protecting the second boot device from further

modification; the protecting selected from the set of protective measures consisting of (i) switching the second boot device to a state of unavailability; and (ii) switching the second boot device to a read-only state.

14. (New) The method of claim 9, wherein:

the step of repairing software further comprises copying software from the second boot device onto the first boot device;

the step of copying software further comprises copying any of application, operating-system and repair-process software, and copying any of a boot record, a partition table, and a basic input-output system (BIOS);

the step of repairing software further comprises copying one of template, backup and archive software from a device other than the first boot device onto the first boot device;

the step of repairing comprises copying one of template, backup and archive software from the second boot device onto the first boot device;

the step of booting from a second boot device comprises switching the second boot device to make the second boot device bootable;

the step of switching comprises generating the signal indicating a need for repair;

the step of booting from a second boot device comprises one of logically switching the second boot device, and physically switching the second boot device; and the step of physically switching comprises altering identification jumpers of a data storage device to be switched, or turning on or off the power to a data storage device to be switched;

the signal is generated by a user altering the state of a physical switch different from an on-off switch of the computer and exposed on an exterior surface of the main computer hardware box of the computer;

the step of repairing software comprises automatically repairing software on the first boot device without further direction from the user according to preset preferences, the preset preferences selected from the set consisting of repairing according to whether (i) to recover data, (ii) to run a virus check, (iii) to reformat the first boot device, (iv) to revert to a backup; (v) to run diagnostics, and (vi) combinations thereof.

15. (New) The method of claim 9 wherein before the step of repairing software the following step is performed: offering a user a choice of thoroughness of repair selected from the set of repairs consisting of a quick repair that re-installs or copies template software without first re-formatting, a better repair that performs a high-level re-format before that copy or re-installation of software, and a best repair that performs a low-level re-format before copying over or re-installing software.

16. (New) A computer that repairs itself to an operational status at any time during operation, the computer comprising:

a main computer hardware box;

a CPU disposed within the main computer hardware box;

a memory disposed within the main computer hardware box;

first and second controllers for respective first and second hard disk drive data storage devices disposed within the main computer hardware box of the computer prior to a need for repair, the second data storage device containing at least one of a backup and a master template;

a bus, communicatively coupling the CPU, memory and first and second controllers;

a switch, communicatively coupled to the second hard disk drive data storage device, for altering the accessibility of the second data storage device to the CPU and exposed through the main computer hardware box or at a surface of the main computer hardware box for manipulation by a user, the switch further including at least one of a switch component for switching an identification setting of the second data store and a switch

1 component for switching power to the second data store, and a switch controller for
2 monitoring the first and second data storage devices to prevent damage to the first or second
3 data storage device during switching; and

4 means for controlling the self-repair of the computer cooperatively coupled
5 with said CPU, said first and second controllers, and said switch.

6 17. (New) The method of claim 11, wherein the step of repairing software
7 comprises: automatically repairing software on the first boot device according to preset
8 preferences without further direction from the user, the preset preferences designating to
9 repair the computer according to whether: to recover data, to run a virus check, to reformat
10 the first boot device, to revert to a backup, or to run diagnostics.

11 18. (New) The method of claim 11, wherein the step of repairing software
12 comprises: reformatting the first boot device and then copying software onto the first boot
13 device; or resetting parameters in a persistent memory and then copying software onto the
14 first boot device.

15 19. (New) The method of claim 10, wherein before the step of repairing software
16 the following step is performed: offering a user a choice of thoroughness of repair selected
17 from the set of repairs consisting of a quick repair that re-installs or copies template software
18 without first re-formatting, a better repair that performs a high-level re-format before that
19 copy or re-installation of software, and a best repair that performs a low-level re-format
20 before copying over or re-installing software.

21 20. (New) The method of claim 13, wherein before the step of repairing software
22 the following step is performed: offering a user a choice of thoroughness of repair selected
23 from the set of repairs consisting of a quick repair that re-installs or copies template software
24 without first re-formatting, a better repair that performs a high-level re-format before that
25 copy or re-installation of software, and a best repair that performs a low-level re-format
26 before copying over or re-installing software.